

WHAT IS CLAIMED IS:

1. A cooling apparatus employed in the drawing process of an optical fiber, comprising:

5 a cooling body having a left cooling body part and a right cooling body part extending along a longitudinal direction of a drawn optical fiber, the cooling body being closed by a sealing cap through which cooling gas can be supplied into the cooling body; and

 at least one turbulence generator mounted within the cooling body to surround the
10 drawn optical fiber for activating a molecular flow of the cooling gas supplied into the cooling body.

2. The cooling apparatus in accordance with claim 1, wherein the cooling apparatus further comprises two or more turbulence generators.

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3. The cooling apparatus in accordance with claim 1, wherein the turbulence generators are mounted along the longitudinal direction of the cooling body in a stacked structure.

20 4. The cooling apparatus in accordance with claim 1, wherein the cooling apparatus body further comprises at least one vibration-damping jig located between the turbulence generator and the drawn optical fiber to uniformly maintain the quality of

cooling the optical fiber.

5. The cooling apparatus in accordance with claim 4, wherein at least one vibration-damping jig is positioned along the drawn optical fiber.

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6. The cooling apparatus in accordance with claim 4, wherein the cooling apparatus body comprises two or more vibration-damping jigs.

7. The cooling apparatus in accordance with claim 4, wherein the vibration-
10 damping jigs are symmetrically mounted in the cooling body.

8. The cooling apparatus in accordance with claim 1, wherein the turbulence generator is provided with at least one slot for enabling the turbulence generator to communicate with the inside of the cooling body through which the drawn optical fiber
15 passes.

9. The cooling apparatus in accordance with claim 1, wherein the turbulence generator is comprised of cooling fans.

20 10. The cooling apparatus in accordance with claim 2, wherein the turbulence generators are mounted in a symmetrical fashion.

11. The cooling apparatus in accordance with claim 1, wherein the left and right cooling body parts are further supplied with cooling water.

12. The cooling apparatus in accordance with claim 1, wherein the left and right
5 cooling body parts are provided with helium gas.

13. The cooling apparatus in accordance with claim 1, wherein the turbulence generators comprises at least one cooling fan for producing turbulence.

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